Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Southwest Florida

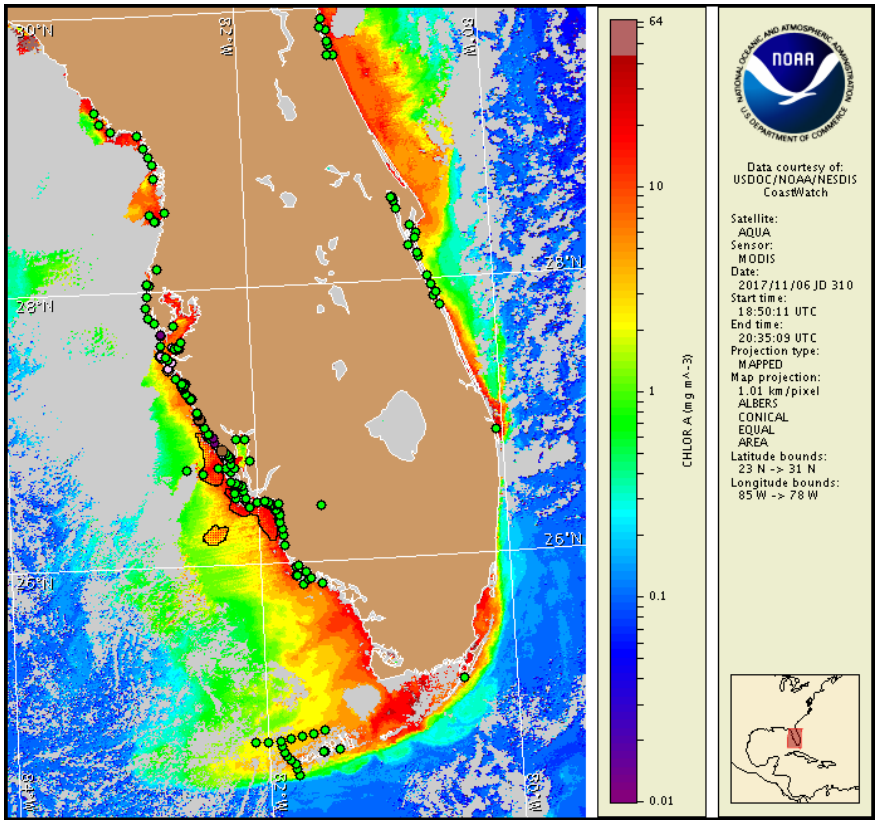
Thursday, 09 November 2017

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, November 6, 2017



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 30 to November 8: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

https://tidesandcurrents.noaa.gov/hab/hab_publication/GOMX_HAB_Bulletin_Guide.pdf

Detailed sample information can be obtained through FWC Fish and Wildlife Research Institute at:

http://myfwc.com/redtidestatus

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: https://tidesandcurrents.noaa.gov/hab/gomx.html

Conditions Report

Not present to low concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of southwest Florida from Pinellas to Charlotte counties, and not present in the Florida Keys. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for Thursday, November 9 to Monday, November 13 is listed below:

County Region: Forecast (Duration)
Nothern Manatee, bay regions: Very Low (Th-M)
Southern Manatee: Very Low (Th), None (F-M)
Southern Manatee, bay regions: Very Low (Th-M)
Northern Sarasota: Very Low (Th), None (F-M)
Northern Sarasota, bay regions: Very Low (Th-M)
Southern Sarasota: Very Low (Th), None (F-M)
Southern Charlotte, bay regions: Very Low (Th-M)
All Other SWFL County Regions: None expected (Th-M)

Health information, from the Florida Department of Health and other agencies, is available at https://tidesandcurrents.noaa.gov/hab/gomx_health.html. For recent, local observations and data check Mote Marine Laboratory Daily Beach Conditions (http://visit-beaches.org/) and the Florida Fish and Wildlife Conservation Commission Red Tide Status (http://myfwc.com/redtidestatus). There have been no reports of respiratory irritation or dead fish.

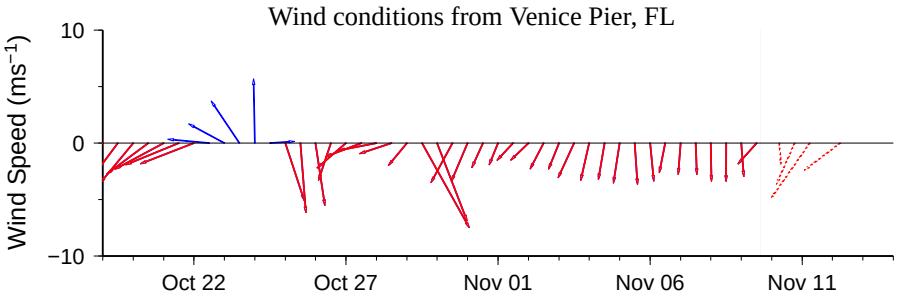
Analysis

Recent samples collected alongshore southwest Florida, including the Florida Keys, indicate *Karenia brevis* ranges from 'not present' to 'low a' concentrations from Pinellas to Charlotte counties, with 'low a' concentrations now present from Manatee to Charlotte counties (FWRI, MML, SCHD, CCPCD; 10/30-11/8). 'Low a' concentrations of *K. brevis* were newly identified near Brohard Paw Park alongshore southern Sarasota County, and in Placida Harbor in the bay regions of southern Charlotte County (FWRI; 11/6). 'Very low a' concentrations have also been identified in the bay regions of Northern Charlotte County (FWRI; 11/6). Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: http://myfwc.com/redtidestatus.

Recent ensemble imagery (MODIS Aqua, 11/6) shows elevated to very high chlorophyll (2 to >20 μg/L) along- and offshore southwest Florida. A large patch with the optical characteristics of *K. brevis* is visible alongshore and in the bay regions from Sarasota to Collier counties, extending up to 15 miles offshore from Lee County.

Forecasted winds over the next several days continue to be upwelling favorable; however, further bloom formation at the coast is not expected.

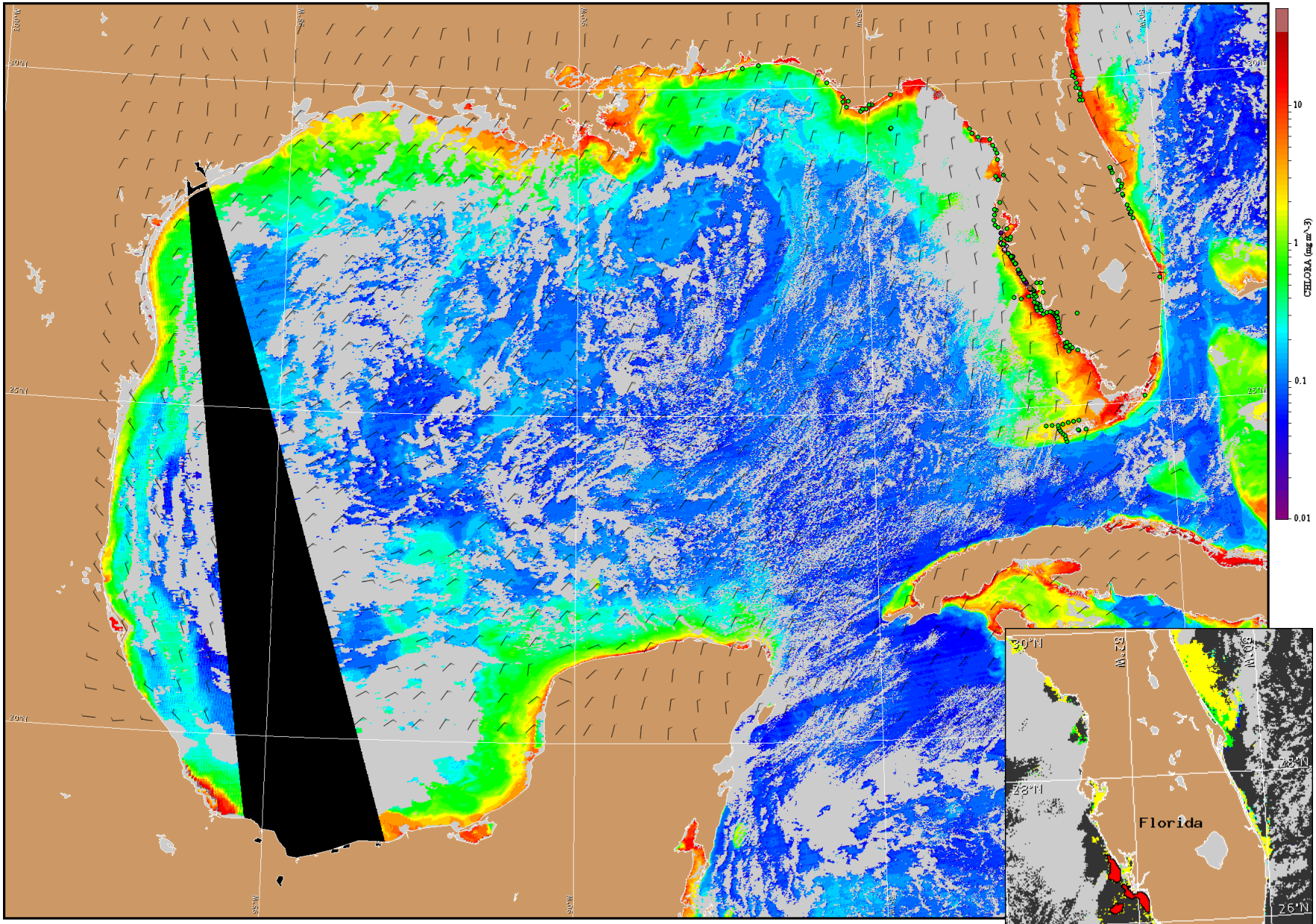
Keeney, Urízar



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Englewood to Tarpon Springs (Venice): East winds (5 kn, 3 m/s) today, becoming southwest winds (10 kn, 5 m/s) in the afternoon. North to northeast winds (5-20 kn, 3-10 m/s) Tuesday evening through Monday.



Satellite chlorophyll image and forecast winds for November 10, 2017 06Z with points representing cell concentration sampling data from October 30 to November 8: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Florida Fish and Wildlife Conservation Commission (FWC) Fish and Wildlife Research Institute. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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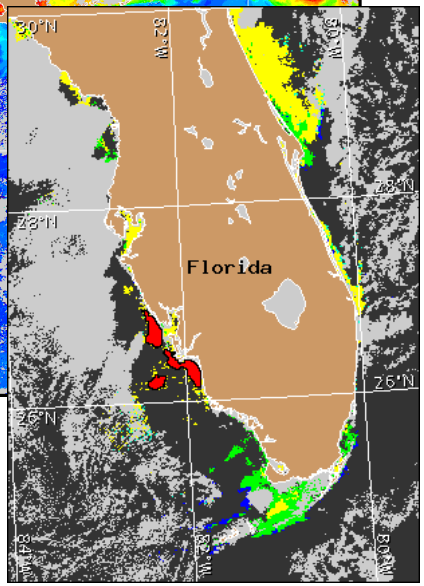

Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).